

**Kents Hill School** )  
**Kennebec County** )  
**Kents Hill, Maine** )  
**A-786-71-A-N** )

**Departmental**  
**Findings of Fact and Order**  
**Air Emission License**  
**After-the Fact**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Kents Hill School of Kents Hill, Maine has applied for an Air Emission License permitting the operation of emission sources associated with their educational facility.

**B. Emission Equipment**

Kents Hill School is proposing to operate the following equipment:

**Fuel Burning Equipment**

<b><u>Equipment</u></b>	<b><u>Maximum Capacity (MMBtu/hr)</u></b>	<b><u>Maximum Firing Rate (gal/hr)</u></b>	<b><u>Fuel Type, % sulfur</u></b>	<b><u>Stack #</u></b>
Boiler #1*	3.4	24.5	#2 fuel oil at 0.35%	1
Boiler #2*	3.4	24.5	#2 fuel oil at 0.35%	1
Boiler #3	4.3	30.7	#2 fuel oil at 0.35%	2
Boiler #4	4.7	33.7	#2 fuel oil at 0.35%	2
Boiler #5	4.3	31.0	#2 fuel oil at 0.35%	3
Boiler #6	1.4	9.8	#2 fuel oil at 0.35%	4

\*: new equipment to be installed in 2000/2001.

**C. Application Classification**

A new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as given in Maine's Air Regulations. The emission for the new source are determined by the maximum future license allowed emissions, as follows:

<u>Pollutant</u>	<u>Max. Future License (TPY)</u>	<u>Sig. Level</u>
PM	1.7	100
PM <sub>10</sub>	1.7	100
SO <sub>2</sub>	5.0	100
NO <sub>x</sub>	5.0	100
CO	0.56	100
VOC	0.14	50

This source is determined to be a minor new source and has been processed as such.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Boiler Emission Units

Kents Hill School currently operates boilers #3-#6 primarily for facility heating needs. In the next year Kents Hill School will be expanding and therefore adding two more boilers, #1 and #2, to augment the facility steam needs. Boilers #1-#6 have a maximum design capacity of 3.4, 3.4, 4.3, 4.7, 4.3, and 1.4 MMBtu/hr each, respectively. The boilers all fire #2 fuel oil with a maximum sulfur content not to exceed 0.35% by weight.

Based on the size of each of these units none are subject to EPA New Source Performance Standards (NSPS) Subpart Dc for units with a maximum heat input greater than 10 MMBtu/hr. Boilers #1-#6 will meet the requirements of BACT through the use of #2 fuel oil with a maximum sulfur content not to exceed 0.35% by weight.

**Kents Hill School** )  
**Kennebec County** )  
**Kents Hill, Maine** )  
**A-786-71-A-N** 3

**Departmental**  
**Findings of Fact and Order**  
**Air Emission License**  
**After-the-Fact**

### **III.AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-786-71-A-N subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. \ 353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - b. pursuant to any other requirement of this license to perform stack testing.
  - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

- (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(16) Boilers #1-#6

A. Boilers #1-#6 shall be limited to the firing of #2 fuel oil with a maximum sulfur content not to exceed 0.35% by weight.

B. Emissions from boilers #1-#6 shall each not exceed the following:

Equipment		PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boiler #1	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.41	0.41	1.2	1.2	0.14	0.03
Boiler #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.41	0.41	1.2	1.2	0.14	0.03
Boiler #3	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.52	0.52	1.5	1.5	0.17	0.04
Boiler #4	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.56	0.56	1.7	1.7	0.19	0.05
Boiler #5	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.52	0.52	1.5	1.5	0.17	0.04
Boiler #6	lb/hr	0.17	0.17	0.49	0.50	0.06	0.01

C. Visible emissions from stacks #1, #2, #3 and #4 shall each not exceed 20% opacity based on a six (6) minute block average basis.

D. Kents Hill School shall be limited to an annual fuel use limit of 200,000 gallons, based on a 12 month rolling total.

E. Kents Hill School shall maintain records of fuel use to include quantity and sulfur content of each delivery.

Kents Hill School )  
Kennebec County )  
Kents Hill, Maine )  
A-786-71-A-N 7

**Departmental  
Findings of Fact and Order  
Air Emission License  
After-the-Fact**

(17) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS       DAY OF       2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 31, 2000

Date of application acceptance: February 7, 2000

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Stephanie L. Carver, Bureau of Air Quality